

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match.
The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

9.5.1.b Specific ALARA Responsibilities

C-A OPM Procedures in which this Attachment is used.		
9.5.1		

Hand Processed Changes

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Approved: Signature on File
 Collider-Accelerator Department Chairman _____ Date _____

C. Schaefer

ALARA RESPONSIBILITIES

COLLIDER-ACCELERATOR DEPARTMENT CHAIR

1. Authorize the ALARA Committee procedures.
2. In consultation with the ALARA Committee, decide which radiological areas need improvement and approve annual ALARA goals.
3. Ensure that the authority, accountability, and resources for implementing the ALARA program are assigned to the levels of the organization as necessary to achieve the goals.
4. Ensure that line management is committed to and supports the ALARA and radiological safety program.
5. Appraise performance of line managers based on their success in achieving their ALARA goal(s).
6. Assure that the components of the BNL ALARA Program are implemented as a part of C-A's Radiation Protection Program.

FIRST OR SECOND LINE SUPERVISORS

1. Promote ALARA attitudes and philosophy in the employees under your direction by demonstrating support and commitment to ALARA.
2. Review plans, procedures, equipment, and the work areas to ensure that radiation exposure and the control of radioactive materials are ALARA.
3. Ensure that adequate manpower and resources are provided to implement ALARA procedures.
4. Ensure that employees obey all RWP requirements.
5. Attend pre-job planning briefings, post-job debriefings, and ALARA Committee meetings, as required.
6. Develop and strive to achieve department / division ALARA goals.
7. Review and report the status of ALARA goals to the ALARA Committee.
8. Ensure that employees attend the appropriate training in radiological safety and ALARA.
9. Carry out operations in such a manner that exposures to workers, researchers, and the general public, as well as releases to the environment, are maintained as far below the limits as is reasonably achievable.

10. Implement all relevant ALARA program requirements.
11. Report radiological accidents, incidents, and other unsafe radiological conditions, including workers' radiological concerns and any associated corrective actions to the appropriate level of management.

ALARA COMMITTEE

1. Provide technical support and assistance to management and staff in implementing the programmatic elements of the ALARA program.
2. Develop, review, and document these elements according to the ALARA policy, program manual, and procedures.
3. Assist in developing and reviewing ALARA training programs.
4. Document and evaluate occupational and general public dose data. Disseminate this data to management for the purpose of tracking administrative dose control levels and ALARA goals.
5. The committee Chair shall ensure the activities of the ALARA Committee are coordinated and documented.
6. Ensure that improvements in the best available technology to reduce dose and the spread of radioactive materials, of which the Committee is aware, are communicated to C-A management, physicists, and engineers.
7. Coordinate the ALARA portion of C-A facility's radiation protection program including the incorporation of ALARA controls into radiological work, research, and surveillance.

LIAISON PHYSICISTS AND PROJECT LEADERS

1. Provide technical support and assistance to supervisors, planners, schedulers, users, and design engineers in implementing the radiological design and operational control elements of the ALARA program.
2. Develop, review, and document the radiological design and operational control elements of the ALARA program according to the ALARA policy and procedures.
3. Present new project or experiment designs to the ALARA Committee for review.

ALARA / RADIOLOGICAL CONTROL COORDINATORS

1. Review procedures and RWPs for radiological work, high dose jobs, high dose experiments, and facility design changes, and recommend improvements to reduce dose and the spread of radioactive materials.
2. Provide technical support for installing and using shielding, remote power tools, containment, spray systems, decontamination, ventilation, and mock-up designs, as needed.

RADIOLOGICAL CONTROLS DIVISION (RCD) FACILITY SUPPORT (FS) REPRESENTATIVE

1. Assist managers and supervisors of operations, maintenance, research, and other support groups to ensure that ALARA is practiced and that ALARA goals are achieved.
2. Provide the radiological safety expertise to support the implementation of all aspects of the radiation protection program.
3. Review selected procedures and RWPs for radiological work, high dose jobs, high dose experiments, and facility design changes, and recommend improvements to reduce dose and the spread of radioactive materials.
4. Report radiological incidents, accidents, and unsafe conditions, including concerns from the radiological staff and any associated corrective actions to management.
5. Stop work when conditions and practices are unsafe and/or would violate DOE orders and safety policy. Immediately report work stoppage to the C-A and RCD management.
6. Provide technical support for installing and using shielding, remote power tools, containment, spray systems, decontamination, ventilation, and mock-up designs, as needed.

RCD RADIOLOGICAL CONTROL TECHNICIANS (RCTs)

1. Conduct radiological surveillance, establish controls for exposure and contamination controls, and prescribe protective requirements during radiological work to reduce dose and the spread of radioactive materials.
2. Provide first line supervisors and workers with ALARA and radiological safety expertise through pre-job briefings, routine monitoring of RWP requirements, and post-job reviews.

3. Maintain radiation exposure and the spread of radioactive materials as low as reasonably achievable during surveys, posting, and job monitoring.
4. Report any radiological problems, along with any corrective actions, to the FS Representative.
5. Provide technical support for installing and using shielding, remote power tools, containment, spray systems, decontamination, ventilation, and mock-up designs, as needed.

LIAISON ENGINEER AND PROJECT ENGINEER

1. Incorporate radiological design features to reduce dose and the spread of radioactive materials to levels that are as low as reasonably achievable into new facilities, modifications to existing facilities, and construction projects.
2. Incorporate the best available technology and designs to achieve the lowest reasonable radiological consequences to accommodate future reductions in occupational and general public dose limits.
3. Participate in ALARA Cost Benefit Analysis to minimize the overall risk to the individual.

C-A TRAINING AND PROCEDURE MANAGER

1. Develop, maintain, and provide training and retraining programs to ensure that the ALARA program is implemented as required.
2. Document ALARA training.

RADIATION WORKER OR C-A USER

1. Reduce your, and to the extent possible, your co-workers' radiation exposure to levels that are as low as reasonably achievable.
2. Minimize the spread of radioactivity and activated materials.
3. Observe all radiological postings.
4. Obey all ALARA-related instructions from RCD Radiological Control Technicians (RCTs) and follow all RWP requirements.

5. Attend pre-job planning briefings, special mock-up training, post-job reviews, and ALARA Committee meetings, as required.
6. Report any radiological problems along with any associated corrective actions to your supervisor and the Facility Support Representative.
7. Provide technical support for installing and using shielding, remote power tools, containment, spray systems, decontamination, ventilation, and mock-up designs, as needed.